

Mr. Michael T. Davis
Algebra II Delta & Eta

Creating Exponential Functions from Ordered Pairs
In-Class
March 9, 2015

Name: Mr. Davis

Directions: Use the table of ordered pairs, to determine an equation for the exponential function.

1. $f(x) = a(b)^x$

x	$f(x)$
-1	$\frac{5}{2}$
0	5
1	10
2	20

$$f(x) = 5(2)^x$$

2. $g(x) = a(b)^x$

x	$g(x)$
-1	$\frac{1}{2}$
1	2
2	4
3	8

$$g(x) = 1(2)^x$$

3. $f(x) = a(b)^x$

x	$f(x)$
-1	$-\frac{1}{12}$
1	-3
2	-18
3	-108

$$f(x) = -\frac{1}{2}(6)^x$$

4. $g(x) = a(b)^x$

x	$g(x)$
-1	$\frac{4}{3}$
1	12
2	36
3	108

$$g(x) = 4(3)^x$$

5. $k(x) = a(b)^x$

x	$k(x)$
-1	$\frac{1}{8}$
1	2
2	8
3	32

$$k(x) = \frac{1}{2}(4)^x$$

6. $p(x) = a(b)^x$

x	$p(x)$
-1	$-\frac{1}{3}$
1	-3
2	-9
3	-27

$$p(x) = -1(3)^x$$

7. $k(x) = a(b)^x$

x	$k(x)$
-2	12
-1	6
2	$\frac{3}{4}$
3	$\frac{3}{8}$

$$k(x) = 3\left(\frac{1}{2}\right)^x$$

8. $p(x) = a(b)^x$

x	$p(x)$
-2	-54
-1	-18
2	$-\frac{2}{3}$
3	$-\frac{2}{9}$

\leftarrow error corrected

$$p(x) = -6\left(\frac{1}{3}\right)^x$$